

DOCUMENT RESUME

ED 441 414

IR 057 685

AUTHOR Byrum, John D.
TITLE Inclusion of Information Covering Electronic Resources in National Bibliographies: Results of a Survey Conducted May-June 1998.
PUB DATE 1999-08-00
NOTE 9p.; In: IFLA Council and General Conference. Conference Programme and Proceedings (65th, Bangkok, Thailand, August 20-28, 1999); see IR 057 674. Produced with the assistance of Patricia Myers-Hayer.
AVAILABLE FROM For full text:
<http://www.ifla.org/IV/ifla65/papers/124-153e.htm>.
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Access to Information; Bibliographies; Cataloging; Electronic Libraries; Electronic Publishing; Foreign Countries; Internet; Library Surveys; Multimedia Materials; *National Libraries
IDENTIFIERS *Electronic Resources; Legal Deposit; *National Bibliographies; Remote Access; United States

ABSTRACT

This paper reports on the results of a survey conducted in spring 1998 to ascertain the extent to which National Bibliographic Agencies (NBAs) were providing coverage of publications in electronic formats. A total of 61 institutions, representing agencies in 59 countries, replied to the questionnaire. NBAs representing 34 countries indicated current coverage of at least one type of electronic resource. In most cases, national bibliographies including electronic resources began in the mid-late 1980s, in some cases expanding coverage to include remote access and interactive multimedia in the mid-1990s. Those that acquire electronic resources generally depend on Legal Deposit legislation, which is in a state of flux in many jurisdictions as laws are being updated to expand coverage. Of those already providing coverage for electronic materials in their national bibliographies, 28 reported that they will expand coverage of electronic materials in the future. Of those that currently do not provide coverage for any electronic materials, 22 are planning to initiate activity in this area in the near future. The survey included a series of questions on materials available through remote access. These are discussed, and research projects and reports related to electronic materials are identified. A follow-up investigation is recommended. (MES)

ED 441 414

**IFLANET**

International Federation of Library Associations and Institutions

Annual Conference

Search Contacts

Conference
Proceedings**65th IFLA Council and General
Conference****Bangkok, Thailand,
August 20 - August 28, 1999**PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

A.L. Van Wesermael

Code Number: 124-153(WS)-E

Division Number: I

Professional Group: National Libraries: Workshop

Joint Meeting with: Bibliography

Meeting Number: 153

Simultaneous Interpretation: No

THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

**Inclusion of Information Covering Electronic Resources in
National Bibliographies: Results of a Survey Conducted
May-June 1998****John D. Byrum***Library of Congress, Washington DC, USA**With the Assistance of Patricia Myers-Hayer*U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Abstract

The author reports on the results of a survey he conducted in Spring 1998 to ascertain the extent to which National Bibliographic Agencies (NBAs) were providing coverage of the relatively newly emerging publications in electronic formats, both hand-held and remote access. A large number of institutions, totaling 61 and representing agencies in 59 countries, replied to the questionnaire. NBAs representing 34 countries indicated current coverage of at least one type of electronic resources; many of these include entries for two or more categories. In most cases, national bibliographies including electronic resources began to do so in the mid- late 1980's, in some cases expanding coverage to include remote access and interactive multimedia in the mid-1990s. Those which acquire electronic resources generally depend on Legal Deposit legislation, which is in state of flux in many jurisdictions as laws are being updated to expand coverage. Of those already providing coverage for electronic materials in their national bibliographies, 28 reported that they will expand coverage of electronic materials in the future, and of those which currently do not provide coverage for any electronic materials, 22 are planning to initiate some kind of activity in this area in the near future. Entries are formulated according to national cataloguing codes, AACR2, ISBD(ER) and other standards. Because of the proliferation of electronic documents on the World Wide Web and through the Internet, the Survey included a series of questions intended to focus on materials available through remote access. These are discussed, and research projects and reports related to electronic materials which respondents noted are identified. The paper concludes by recommending that a follow-up investigation be undertaken within the next five years in order to enable the profession to up-date its understanding of how national

BEST COPY AVAILABLE

2

IR057685

bibliographies are furthering their efforts to fulfill their responsibility to record these materials within their national heritage.

Paper

INTRODUCTION

In early summer 1998, questionnaires were sent to the membership of the Conference of Directors of National Libraries (CDNL) to solicit information regarding inclusion of information for electronic resources in national bibliographies. The purpose of this Survey was three-fold:

- (1) To establish the extent to which coverage was now being provided for this recent and increasingly important material and the extent to which greater attention to electronic resources was intended for the near future.
- (2) To ascertain the nature of the cataloguing conventions -- rules, standards, and local practices -- being followed in representing entries for electronic materials in cases where National Bibliographic Agencies (NBAs) are providing coverage.
- (3) To determine how NBAs are dealing, in particular, with remote access electronic resources, such as materials available on the INTERNET and to ascertain what solutions they have instituted to meet the unique problems of such entities.

A large number of institutions, totaling 61 and representing agencies in 59 countries, replied to the questionnaire, providing input from National Bibliographic Agencies from Albania, Angola, Armenia, Australia, Austria, Botswana, Brazil, Canada, Chile, Croatia, Czech Republic, Denmark (1), Estonia, Finland, France, Gambia, Germany, Great Britain, Guatemala, Hungary, Iceland, Israel, Italy, Japan, Korea, Latvia, Liechtenstein, Macedonia, Madagascar and Malawi, Maldives, Malta, Mexico, Mongolia, Namibia, Netherlands, New Zealand, Nigeria, Norway, New Guinea, Peru, Philippines, Poland, Portugal, Romania, Russia (2), Scotland, Singapore, Slovak Republic, Slovenia, South Africa, [University of] South Pacific, Spain, Sweden, Switzerland, Tanzania, Tunisia, United States, Venezuela, and Wales. As a result, participation is world-wide in nature, although regions are not represented equally: 2 replies from North America; 6 from Central and Latin America; 20 from Western Europe; 13 from Eastern Europe; 2 from the Middle East; 9 from Sub-Saharan Africa; 9 from Asia and Indian/Pacific Ocean countries.

COVERAGE

In revealing coverage for electronic resources, the Survey provided respondents with a broad definition for the medium:

Electronic resources are those materials encoded for manipulation by a computer, basically comprising "**data**" and/or "**programs**". "**Data**" includes text (e.g. books, journal, articles, both issued electronically and electronically digitized), numeric data, representational data, while "**programs**" include database programs, desktop publishing programs, word processor programs, systems programs, other electronic application programs, etc. For the purpose of the Survey, electronic resources were divided by format into the following categories: Electronic resources on optical discs, including CD Roms, Photo Cds, et; Electronic resources on disk(ette)s; Electronic resources on magnetic tape; and Remote electronic resources, such as those on the Internet and/or World Wide Web, and online services. In addition, Interactive Multimedia, which combines media

residing in one more physical carriers, was included as a category.

Within this scope of this definition, NBAs representing 34 countries indicated current coverage of at least one type of electronic resources; many of these include entries for two or more categories.

Below is given more detailed information regarding the extent to which the different kinds of electronic materials are now being included in national bibliographies:

Table 1

Category of Electronic Material	No. of NBAs reporting coverage
Material on optical discs	29
Material on disk(ette)s	30
Material on magnetic tape	09
Remote resources	17
Interactive Multimedia	21

Regarding each category of material, respondents were asked to report the date at which coverage began and approximate number of bibliographic entries for the latest issue of your national bibliography. The information in Table 2 reflects replies overall, giving a general impression, with replies falling outside the "norm" not included:

Table 2

Category of Electronic Material	Coverage began	No. of entries (latest issue)
Material on optical discs	Late 1980s	300
Material on disk(ette)s	Late 1980s	100
Material on magnetic tape	1980s	100 or less
Remote resources	Mid-1990s	100-200
Interactive Multimedia	Mid-1990s	100-300

Thus, it appears that those national bibliographies including electronic resources began to do so in the mid- late 1980's, in some cases expanding coverage to include remote access and interactive multimedia in the mid-1990s. In the usual case, the quantity of titles included in the latest issue is still modest.

Electronic material can take on a variety of manifestations in terms of kind of publications they manifest. The Survey revealed that national bibliographies providing coverage produce entries which fully reflect the gamut of possibilities:

Table 3

Kind of publication represented	Number of NBAs reporting coverage
Serials (e.g. journals)	27
Texts (e.g. books)	32
Directories & databases	27
Bulletin Boards & discussion lists	2
Digital reproductions	10
Online services	6
Web sites	5
Programs (e.g., word processors, games, desktop publishing)	16

Respondents were asked to indicate the source(s) by which they acquire the electronic material they cover in their national bibliographies. Their replies revealed a mixture of acquisitions strategies, including purchases (19 NBAs), gift/exchanges (20 NBAs), but most importantly, legal deposit (28). Regarding the latter, it was clear from replies that, where updated to cover electronic resources, legal deposit requirements have been changed only recently, and in several nations such changes are still in draft. In some cases, legal deposit may not treat hand-held resources and remote access publications similarly, with the former more likely subject to deposit; this is also true regarding some jurisdictions where proposals to expand legal deposit laws are under consideration. As a result, instances were reported where the electronic versions might be subject to deposit arrangements more of a voluntary than legal nature and were negotiated on a case-by-case basis with publishers. Also reported were arrangements that involved returning material to publishers after bibliographic entries are prepared. In one report, the author observed: "...remote electronic resources are not to be the subject of legal deposit [under the proposal to review the current law] and should be acquired selectively by contract." One respondent observed that while the national bibliographic agency did not download and archive the electronic resources which it describes, it did provide links to their Web addresses and observed that "this can not probably be called 'legal deposit'."

Of those already providing coverage for electronic materials in their national bibliographies, 28 reported that they will expand coverage of electronic materials in the future. Expansion could occur as a result of including a greater number of items for categories of resources already covered, initiating coverage for categories not currently within scope, or both. One category mentioned frequently in this regard was remote access material relating to the nation, while more than one reporting NBA cited digital videodiscs (DVDs) as another likely candidate. Most respondents expecting to increase coverage stipulated increased coverage of more traditional formats, however. In several cases, anticipated changes in legal deposit requirements were cited as governing the nature and size of increased representation of these materials in national bibliographies. Most anticipating an opportunity to increase coverage of electronic material indicated that such expansion would occur very soon -- in several cases in 2000 or before.

Of those NBAs replying to the Survey which currently do not provide coverage for any electronic materials, 22 are planning to initiate some kind of activity in this area in the near future. (Within this group, however, some indicate that they encounter electronic materials issued as accompanying material for printed publications; when this happens these NBAs provide for the electronic component within the bibliographic entry for the host document.) Some respondents reported that not only did their legal deposit requirements not cover electronic resources, but that few electronic publications within the scope of their bibliographies were being produced at this time. A large number of respondents from national bibliographic agencies in developing nations were among those which do not yet cover electronic materials but plan to do so soon, although surprisingly there were also some

prominent Western European countries still in the "planning for coverage" phase. In many instances, those anticipating expansion of national bibliographies to include electronic resources directly link it to revision of requirements to extend legal deposit to add one or more types of electronic material.

POLICIES FOR BIBLIOGRAPHIC DESCRIPTION

The respondents providing coverage for one or more types of electronic materials were asked a series of questions intended to establish the cataloguing practices and policies used for the bibliographic descriptions to appear in their national bibliographies. Most reported that their staff follow the national cataloguing rules, with 24 indicating that their descriptive policies are based on the *Anglo-American Cataloguing Rules, Second Edition*, either the English text, a translation of it, or an adaptation. Also used are the *CONSER Cataloging Manual: Module 31*, which covers descriptive cataloguing of remote access computer files, and in some cases *Cataloging Internet Resources* by Nancy B. Olson (ed.). *UNESCO Guidelines for Bibliographic Description* was cited by one respondent. In some cases, respondents indicated that they employ national cataloguing codes in conjunction with one or more of the standards mentioned above.

Respondents from Australia, Austria, Denmark, Estonia, France, Germany, Korea, Peru, Singapore, Slovak, Sweden, Switzerland and Tunisia reported that their national cataloguing rules have been revised to incorporate more up-to-date provisions covering electronic materials, such as those presented in the recently issued *International Standard Bibliographic for Electronic Resources (ISBD(ER))* (3). In Armenia, Canada, Czechoslovakia, Finland, Hungary, Mexico, the Netherlands, New Zealand, Norway, Russia, Scotland, South Africa, and the U. S. projects to revise national rules were reported as having begun; in most instances, these too will base changes on the provisions of *ISBD(ER)*. Revision of *AACR2* was initiated with the appointment in early 1998 of a task force by the American Library Association's Committee on Cataloging: Description and Access to recommend amendments to incorporate features of *(ER)*, but the rule revision process is labor intensive and publication of approved revisions is not likely until 2000 or later. In other cases, staff at the NBAs are using *ISBD(ER)* in conjunction with existing national rules or *AACR2*. In all but a few cases, respondents felt that the cataloguing rules used in-house provided adequate guidance for preparation of bibliographic entries for electronic materials.

Bibliographic descriptions for electronic resources may be shorter, fuller, or about the same as those for other materials, depending on the rules and policies followed by the NBA. When asked for information regarding their practices, one of the respondents indicated that their staff were producing briefer records for these materials, while nine reported that their entries were more extensive due to the technical features of the medium which they include in descriptions for them. The vast majority, however, felt that bibliographic entries for electronic resources were more or less the same as those for other publications, noting that the level of cataloguing is the same regardless of the physical format.

Given the intangible nature of electronic publications, where the content is usually not accessible without machine manipulation, the Survey sought to learn the sources of information used by staff at NBAs for the entries they devised. Table 4 reveals the response to this inquiry, with most replies indicating use of more than one approach to obtain the necessary information.

Table 4

Source(s) of information used for descriptive entries	Number of NBAs reporting
From information within the material itself	31
Through examination of material on the Internet	12
From information supplied by publishers	25
From Dublin Core metadata supplied by the creator	5

As with most other kinds of non-book publications, users of national bibliographies often expect to be alerted to the nature of the format when encountering entries for electronic materials. Such notification can be handled in a variety of ways -- by including within the bibliographic description the General Material Designation and/or Specific Material Designation or by giving the information in a note; in the case of the machine-readable version of the national bibliography, this information can also be conveyed by giving a code or tag in the fixed field portion of appropriate records. When asked to indicate the techniques their national bibliographies employed to alert users to electronic materials, respondents revealed multiple approaches in most cases, as indicated in Table 5.

Table 5

Identification technique used	No. of respondents reporting use
Giving General Material Designation	25
Giving Special Material Designation	26
Giving information in notes	20
Giving code or tag	21

REMOTE ACCESS ELECTRONIC RESOURCES

Because of the proliferation of electronic documents on the World Wide Web and through the Internet, a recent development which introduced many new bibliographic and other related problems, the Survey included a series of questions intended to focus on materials available through remote access. As Table 1 above indicates, 17 national bibliographic agencies report coverage of such materials; however, only 14 of these supplied information with regard to these specific questions. As for future coverage of remote access electronic resources in particular, nearly 20 NBAs indicated decisions to do so or are seriously exploring the possibility. Not surprising, where provided, coverage is usually limited to resources originating in or related to the geographic/linguistic or other coverage of the bibliography.

First, respondents were asked to advise as to whether their national bibliographies provide separate entries for remote access resources which are the same or similar to material in another format, e.g. as a printed publication. Fourteen reporting NBAs replied to this question in the affirmative and seven in the negative, thereby establishing a preference for separate bibliographic entries for various manifestations of the publication. In two cases, respondents indicated that a Universal Resource Locator (URL) is added as a note to the bibliographic entries for printed publications in lieu of separate bibliographic entries, while in two other cases, respondents indicated that a separate entry is originated but the entry for the other version is amended to include the appropriate URL to link it to the electronic version (4).

Next, respondents were queried as to whether their cataloguing staff encountered particular difficulty in ascertaining any of the data elements to be included in descriptions for remote access works. Several replied in the affirmative, citing especially (1) determination of the chief source of information to be used for the description; (2) "imprint" information, such as place and date of "publication"; (3) dealing with differences which affect the appearance of the publication depending on particular format (e.g. PDF, HTML); (4) discovery of the title

proper, giving a variety of titles to choose from among in the case of many remote access publications; (5) identification of editions, given their dynamic nature of remote material; (5) lack of numbering for remote versions of serials, which often may be more in the nature of a data base; (6) closely related to this, the frequent difficulty of determining when a serial publication started or if/when it ceased. For the most part, the "fluidity" of remote access materials explains many of the difficulties cataloguers encounter when describing them.

In particular, information regarding the URLs for electronic publications was considered subject to change and therefore more likely to be unreliable in terms of a data element within the bibliographic record. Nevertheless, all respondents reported that such information is routinely given in the case of remote access material. (In some cases where the national bibliography is available in machine-readable form, mention was made of "hot links" by which users might access the material directly from the URL in the bibliographic record.) But, because of the highly labor intensive nature of catalogue maintenance work, only a few respondents indicated a policy regularly to monitor the reliability of URL information, although a few cited the possibility of utilizing programmatic approaches to the task which are now under development. Others reported that they might update this data element if necessary when encountered or when the issue was brought to attention by way of "error reports" from publishers, the public or staff.

RESEARCH PROJECTS AND INVESTIGATIONS

The Survey concluded by inviting respondents to indicate research in which staff of the NBA might be engaged as related to bibliographic control and access to electronic resources and to provide citations to any resulting publications. This request elicited a substantial amount of information about several projects undertaken or in development on the topic, but especially as related to remote access material. In some cases, respondents cited URLs to provide links to Web sites and electronic publications where the visitor may discover important information on the topic covered by the Survey.

- <http://lcweb.loc.gov/rr/business/beonline/beohome.html> (Project BEOnline, Library of Congress, USA).
- <http://www.nla.gov.au/nla/staffpaper> (Research on archiving and long-term access, Australia).
- <http://hosted.ukoln.ac.uk/biblink> (BIBLINK Project, European Union).
- <http://www.dbi-berlin.de/projekte/projekte.htm> (Metadata initiatives, Germany).
- <http://purl.dk/rapport/html.uk/> (Project INDOREG, Denmark).
- <http://orcddev.oclc.org:6990>; <http://www.oclc.org/oclc/man/9256cat/toc.htm> (InterCat Project, OCLC, USA and related documentation).
- http://lcweb.loc.gov/catdir/cpso/elec_res.html (ER Cataloging Guidelines, Library of Congress, USA).
- <http://kulturarw3.kb.se/> (Project to collect all Swedish Web pages).
- <http://www.svesok.kb.se/> (Swedish cataloguing and search service project).

Respondents also provided citations to information available in print produced by members of their staff regarding their approaches to providing access to electronic resources and other related topics:

- Bulletin d'informations de l'Association des bibliothécaires français, no. 163, 2e trim. 1994; p.88; Bulletin des bibliothèques de France, 1995, no. 3, pp. 34-38.
- "Handling Electronic Publications: Practices and Projects. Presentation at the 6th National BAD Conference, Averio, 7 May 1998" by Marco de Niet (National Library of the Netherlands) [unpublished ?].
- "Deposit for Dutch Electronic Publications: Research and Practice in The Netherlands" by Trudi C. Noordermeer (National Library of the Netherlands). In: Research and Advanced Technology for Digital Libraries (Springer Lecture Notes in Computer Science 1334) (1998?).

- "En Undersøkelse av Norske Tidesskrifter på Internet" by Anne M. Langballe (National Library of Norway) (to be published in *Bok og Bibliotek* 1998, no. 3).
- "Remote Access Electronic Serials and the National Library of Norway" by Anne M. Langballe (Paper presented at the 64th IFLA Conference, Amsterdam, 1998).
- "Elektronnye izdaniia" by A. B. Antopulskii and K. V. Vigurskii. (Scientific Research and Development Centre "Informregistr", Moscow) In: *Informatisinnye resursy Rossii* (1998, no. 1).
- "La Biblioteca electrónica en España" by Carmen Caro (National Library of Spain). In: *LIBER* (at press).
- "Publicaciones Electrónicas y Depósito Legal" by Mclero Garcia [and others] (National Library of Spain). In: *Xornadas de Arquivos, Bibliotecas e Museos de Galicia*. A Coruña, 1997; p. 325-336.
- "La Digitalización de Materiales Bibliotecarios en la Biblioteca Nacional" by Francisca Hernández and Xavier Agenjo. In: *Boletín de ANABAD*, v.45, no. 3 (1995).
- "Los Recursos Electronicos" by Ma. Lusia Martínez-Conde. In: *Los Materiales Especiales en la Biblioteca*. Gajón: Trea, 1998.

CONCLUSION

In conclusion, the author would like to express great appreciation to the more than 60 respondents to his Survey for the time and thought they invested in their replies. The information, he believes, provides a clear picture of the situation at the close of the 1990s and clear evidence that throughout the world national bibliographic agencies are responding to the challenges posed by the advent of electronic resources, both hand-held and remote access. It is clear, however, that many are preparing their policies and procedures and that other circumstances now in progress, such as changes to legal deposit requirements, will considerably alter the findings of this Survey in the near term. Therefore, the author recommends that a follow-up investigation be undertaken within the next five years in order to enable the profession to up-date its understanding of how national bibliographies are furthering their efforts to fulfill their responsibility to record these materials within their national heritage.

Endnotes:

1. From Denmark, replies were received from both the Royal Library and the Danish Library Center.
2. From Russia, replies were received from both the Scientific Research and Development Centre "Informregistr", Moscow and the National Library of Russia, Saint Petersburg.
3. Munchen: K. G. Saur, 1997 (UBCIM publications; N. S. vol. 17)
4. Regarding archiving policy, one respondent indicated that the practice is not to "collect" any electronic resources where in-print versions provide an alternative form.

Latest Revision: July 28, 1999

Copyright © 1995-1999
International Federation of Library Associations and Institutions
www.ifla.org